

IN THE CLAIMS:

The pending claims are set forth below and have been amended and/or cancelled, without prejudice, where noted.

1. (Currently Amended) A process for forming a catalyst for the polymerization of olefins, comprising:

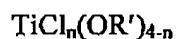
- (a) combining a chlorinating agent with a magnesium alkoxide compound to form a magnesium-titanium-alkoxide adduct; and
- (b) combining the magnesium-titanium-alkoxide adduct with an alkylchloride compound and/or benzoyl chloride to form a magnesium chloride support; and
- (c) combining the magnesium chloride support with a titanium chloride to form the catalyst.

2. (Original) The process of claim 1, wherein the magnesium alkoxide is formed by reacting a magnesium alkyl with an alcohol generally represented by the formula ROH, wherein R is an alkyl group containing about 1 to 20 carbon atoms.

3. (Original) The process of claim 2 wherein the magnesium alkyl is butylethylmagnesium.

4. (Original) The process of claim 3, wherein the alcohol is 2-ethyl hexanol.

5. (Original) The process of claim 1, wherein the chlorinating agent is generally represented by the formula:



wherein R is an alkyl, cycloalkyl, or aryl group, and wherein n is from 1 to 3.

6. (Original) The process of claim 5, wherein n is 1.

7. (Original) The process of claim 1, wherein the chlorinating agent is $\text{ClTi}(\text{O}^i\text{Pr})_3$.

8. (Original) The process of claim 4, wherein the chlorinating agent is $\text{ClTi}(\text{O}^i\text{Pr})_3$.
9. (Original) The process of claim 1, wherein the alkylchloride compound is selected from the group consisting of benzoyl chloride, chloromethyl ethyl ether, and t-butyl chloride.
- 10-11. (Cancelled)
12. (Currently Amended) The process of claim +1 wherein the a benzoyl chloride / BEM magnesium molar ratio is from about 1 to about 20.
13. (Currently Amended) The process of claim +1 wherein the a benzoyl chloride / BEM magnesium molar ratio is from about 1 to about 10.
14. (Currently Amended) The process of claim +1 wherein the a benzoyl chloride / BEM magnesium molar ratio is from about 4 to about 8.
15. (Original) The process of claim 1, wherein the reacting the magnesium-titanium-alkoxide adduct with the alkylchloride compound also forms a by-product selected from the group consisting of an ether compound, an alcohol compound, and mixtures thereof.
- 16-17. (Cancelled)
18. The process of claim 16, further comprising washing the magnesium chloride support prior to ~~the contacting the magnesium chloride support with the titanium tetrachloride forming the catalyst.~~
- 19-27. (Cancelled).